THAT WHICH IS CLAIMED IS:

1. A solid-state image sensor comprising an array of pixels, in which each pixel comprises a photodiode in circuit with a semiconductor device operating in sub-threshold to provide a signal which is proportional to the logarithm of the light intensity on the photodiode, and means for calibrating the pixels; and in which the means for calibrating each pixel comprises means for applying a voltage having a constant rate of change across a constant capacitance within that pixel thereby to produce a constant current within the pixel.

2. An image sensor according to claim 1, in which each pixel includes a switching device between the photodiode and said semiconductor device, the switching device being operable during calibration to isolate the photodiode from the semiconductor device.

3. An image sensor according to claim 2, in which said signal is applied to the inverting input of an inverting amplifier, the non-inverting input of the amplifier being connected to a reference voltage, the amplifier output providing the pixel output signal.

4. An image sensor according to claim 3, in which during calibration a ramp voltage is applied to said non-inverting input to provide said constant rate of change of voltage.

5. An image sensor according to claim 4, in which said ramp voltage can also be applied as the

reference voltage at the beginning of image-capturing operation of the pixel.

6. An image sensor according to any of claims 3 to 5, in which said semiconductor device is controlled by a feedback loop from the output of the amplifier.

7. An image sensor according to any of claims 3 to 6, in which said amplifier for each pixel is wholly contained within the pixel.

8. An image sensor according to any of claims 3 to 6, in which said amplifier for each pixel is partly contained within the pixel and partly outside the image area.

9. An image sensor according to any of claims 3 to 8, in which said constant capacitance is provided by the capacitance of the drain of said semiconductor device and the capacitance of the inverting input of the amplifier.

10. A method of calibrating a solid-state image sensor operating in logarithmic mode, in which a constant current is applied to each pixel during calibration to derive pixel reference values; and in which said constant current is generated within each pixel by applying a voltage having a constant rate of change across a constant capacitance within that pixel.